

TECHNICAL COMPLIANCE COMMITTEE Sixteenth Regular Session Electronic Meeting 23 – 29 September 2020

12th ANNUAL REPORT FOR THE REGIONAL OBSERVER PROGRAMME

WCPFC-TCC16-2020-RP02_rev1¹ 6 October 2020

Paper by the Secretariat

Purpose

1. This paper presents the 12th Annual Report of the WCPFC Regional Observer Programme (ROP), for 2019 for the information and consideration of TCC16.

Introduction

2. Paragraph 2 of Article 28 of the WCPFC Convention states that: "The observer programme shall be coordinated by the Secretariat of the Commission and shall be organized in a flexible manner which takes into account the nature of the fishery and other relevant factors."

3. Paragraph 3 of CMM 2018-05 for the Regional Observer Programme states that: "The Secretariat of the Commission shall provide an annual report to the Commission with regard to the Commission ROP and on other matters relevant to the efficient operation of the programme."

4. Paragraph 13 of CMM 2018-05 on the "Role of the Secretariat" lists several ROP activities that the Secretariat is required to carry out.

5. This paper reports on the several aspects of the ROP as required by the Convention, CMM 2018-05 and the outcomes of WCPFC16.

- 6. The structure of the Report is as follows:
 - General
 - Available Observer Data and ROP observer coverage
 - Data and monitoring through the ROP of the Commission's CMMs intended to minimize impacts of fishing on species of special interest including non-target species
 - Authorised observer providers to the ROP and update on ROP audits
 - ROP Compliance-related Matters
 - Observer Safety Matters
 - Support from the Secretariat to National and Regional Observer programmes
 - Cross endorsement of observers to collect data on behalf of other tuna RFMOs
 - Implications of Covid-19 Intersessional decisions and travel restrictions as at 1 September 2020
 - Secretariat observations
 - Administration notes
 - Recommendations

¹ On 6 October 2020, a correction was made to the original version of the paper issued on 10 September 2020, to clarify the nature of purse seine whale shark and cetacean cases notified in the online compliance case file system, are instances where a ROP observer has recorded in ROP data that an interaction occurred between a purse seine vessel and cetaceans during **q** trip.

General

7. The Secretariat continued to support observer and debriefer trainings, with assistance given on request to help CCM programmes with observer training. It continues also to assist national and subregional observer programmes on matters regarding provider and observer roles in relation to CMMs, Commission requirements, Commission minimum standards for the ROP, data collection and data entry requirements, monitoring of transhipment and other ROP observer related issues. Since the last report the Secretariat's Observer Programme Coordinator has participated in several observer related meetings, workshops and training, such as the Regional Observer Coordinators Workshop in Tuvalu, the PNA Observer Coordinators workshop in Tuvalu; Philippines observer training in Navotas Philippines, the IATTC/WCPFC Cross Endorsement observer training in PNG, the WPEA observer training in Da Nang, Vietnam, Commission meetings in Pohnpei and in Port Moresby. For 2020, ROP Audits were organized for 6 observer programmes. The Secretariat continues to answer many questions about CMM's and other issues involving observers, to members and others to help them understand CMM's, and other rules of the The Secretariat has continued to utilize ROP observer data in the online "WCPFC Commission. Compliance Case File System" and in other papers and reports prepared for WCPFC meetings.

Data Entry Staff "Pohnpei"

8. The Secretariat currently employs two data entry staff, (a further 2 positions are vacant at the time of writing this report) who primarily enter data collected by the 'FSM Observer Programme' into SPC databases, and on behalf of SPC. When this is completed, the data entry staff continues to enter data sent by SPC to the Secretariat. Staff from the data entry team also assist with the entry of other information at the Secretariat when required. The Data Quality Officer and the ROP Coordinator regularly offer advice and assistance to the team on data entry problems and questions.

ROP Data Fields

9. There were no additions to the minimum standard data fields in 2019. The list of minimum standard data fields are available on the WCPFC website: - <u>https://www.wcpfc.int/regional- observer-programme</u>. The Secretariat is maintaining a list of some suggestions made by coordinators of fields to be reviewed and possibly removed because they are redundant fields, and others that need updating.

10. E-reporting technologies has the potential to reduce the timeframes between the end of an observed trip and the receipt of data by WCPFC. Updates of software and data information can be easily deployed to observers tablets and laptops in a timely manner, the implementation of updates or additions to observer data fields can be comparably simpler through E-reporting systems than if hard copy workbooks need to be updated and distributed to all observers operating throughout the region. Several observer programmes have already or are going to switch to full electronic reporting for observers in their programmes, some are using both workbooks and E-reporting and others continue to use only the work-book formats.

11. To date the Commission has not defined a set of specific approved minimum ROP required data fields for observers to collect when monitoring high seas transhipment activities. Although a set of forms that could be used as guidelines were developed on request by some programmes.² The Secretariat understands that SPC and FFA are presently working on the development of training courses and a set of minimum data fields for Pacific Island observer programmes to collect whilst deployed on carrier vessels operating in the Convention Area, including when involved in high seas and in port transhipments. A consultant organised by SPC and FFA spent time on a carrier vessel for a complete transhipment trip on the carrier which only received fish catch from longliners on the high seas. This report is still to be made public at the time of writing this ROP report, but the Secretariat understands that there is useful guidance provided in the report, and that a "Transhipment Work-book" for observers to use on carriers was developed as part of this consultancy

² The guideline published by the Secretariat that maybe considered by ROP observer programmes when developing their monitoring programmes for transshipment activities, including in high seas waters:= Form FC1 - Fish Carrier General Description; Form FC2 - Observer At Sea Transshipment Report; Form FC3 - Catch Destination Form (access from <u>https://www.wcpfc.int/regional-observer-programme</u>)

Available Observer Data and ROP Coverage

12. The paper **TCC16-2020-IP03** Status of Observer Data Management (Updated version of WCPFC-SC16--ST IP- 02) indicates the amount of data that has been entered and highlights CCMs with fleets active in the WCPFC Convention Area (WCPFC-CA), it was noted that the deterioration in the timeliness in the provision of purse seine observer data has improved. The recommended time frame for submission of observer collected data to the Secretariat or the 'Commission Data Provider' (SPC) was determined at WCPFC10 and should where possible occur within 100 days of the observer disembarking a purse seine vessel; a n d w it h in a 120 days of the observer disembarking a longliner.

13. In 2019 the national observer programme continued to trial implementation of electronic reporting to collect data, with some programmes converting to solely using electronic tablets. Problems earlier on in this development in the changeover seem to have been rectified by programmes changing to electronic reporting. With the introduction of electronic reporting by tablets, ROP observer data entry and quality is expected to improve.

14. The Secretariat understands that many Pacific Island national and subregional programmes have upgraded their debriefer training and content to better improve the quality of information collected before it is entered in the SPC databases. All indications of the data collected and entered is that the debriefing of this information continues to improve. Generally, detectable error in the observer data are picked up by the debriefers or the data entry staff. Further filtering occurs when questionable errors with "Numbers, Species, Fate or Condition" coding is checked during analysis of the date entered in the data bases.

ROP Observer Coverage 2012-2019

15. Table 1 represents the observer trips and observer sea days between 2012 to 2019, that data was collected for the rest of the tables in this report (Tables 2 to 15). Noting that in the period 2012-2019 there were 16217 observer trips made and that observers spent 568,216 observer sea days collecting data. An average of 36 days was spent on purse seiners and an average of 34 days on longliners over the period.

Trip Year	No of PS Trips	Observer PS Sea days	No of LL Trips	Observer LL Sea days	Total Observer Trips	Total Observer Sea Days
2012	1194	40937	570	17151	1764	58088
2013	1404	50394	622	17241	2026	67635
2014	1491	52163	649	19414	2140	71577
2015	1433	49119	765	24295	2198	73414
2016	1338	47282	730	24415	2068	71697
2017	953	38496	823	35097	1765	73473
2018	1392	49919	850	34682	2242	84601
2019	1236	42112	778	25619	2014	67731
Total 2012-2019	10441	370422	5787	197914	16217	568216

Table 1 2012 to 2019 Total Observer PS & LL Trips and Sea days.

* Data entered as of August 31st, 2020

Table 2 Codes used in Tables 1 to 18

Codes	Explanation
R	Retained whole or processed
Α	Alive when released or discarded
D	Deceased when discarded
U	Unknown Condition when released or discarded.
PS	Purse-seine
LL	Longline

Table 2 indicates the codes used in tables 1 to 18. At the TCC 15 it was requested that seabird tables be expanded to show historical catches, it was decided to do this for all catches of species of special interest (SSI). The information in this report is held by SPC and the figures represents raw data collected by the observers that have been debriefed and checked for mistakes or errors.

ROP Observer Coverage - Longline 2019

16. The minimum ROP coverage rates for longliners is set at 5%, based on one of the approved and agreed metrics for longline coverage. As per CMM 2018-05, which replaced CMM 2007-01, the 5% ROP coverage rate was to be achieved by 30 June 2012. There is improvement in overall longline coverage with all programmes attaining the 5% ROP coverage rate in 2019. The overall % coverage of all observer data by total effort measures in hooks (both ROP and non-ROP) for 2019 is 4.6%. Additional details on coverage are included in paper **WCPFC-TCC16-2020-IP03**; which has tables that shows coverage with the different fleets, noting that some fleets fish domestically and had no ROP trips in 2019.

17. There is no decision made by the Commission on the minimum size of longline or other vessels to which the implementation of the ROP will be deferred (CMM 2018 -05 Annex C). In practice, the Secretariat understands that placement of observers is based on safety and the ability of an observer to be able to work on a vessel without unduly hindering the operation of the vessel.

ROP Observer Coverage purse seine 2019

18. Observer coverage for purse seine vessels was monitored by the Secretariat with most information supplied by observer flag CCMs and some from providers for purse seine vessels when fishing in the Convention area 20N - 20S. The Secretariat was able to verify most placements but not all during 2019. Table 3 indicates reported ROP trips for 2019. A small number of purse seiners may have fished for part of the year as domestic vessels and their ROP trip may or may not be reported in the table.

	PS	RFV						ROP Not			<u>.</u>		200	_ / _ /	
ССМ	on RFV	Fished	2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
СК	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0
CN	39	16	15	15	13	15	16	16	16	14	15	15	16	16	15
EC	31	0	2	3	2	1	0	0	0	1	2	2	3	0	2
ES	33	2	1	1	1	1	1	1	0	0	1	1	1	2	1
FM	33	19	17	18	21	18	13	13	11	15	17	19	19	19	17
JP	155	27	26	28	28	24	25	26	27	28	28	28	28	27	26
KI	16	8	9	10	10	9	9	7	7	7	8	8	8	8	9
KR	55	26	25	24	26	25	24	25	25	24	25	26	26	26	25
MH	11	9	11	9	10	9	9	9	8	8	8	8	7	9	11
NR	9	9	7	7	7	7	7	7	7	9	9	9	9	9	7
PA	29	1	1	1	1	1	1	1	1	0	0	1	1	1	1
PG	50	12	9	11	11	6	8	8	9	7	5	5	5	4	9
PH	386	49	37	33	33	30	35	32	4	4	7	30	31	29	37
SB	23	7	2	2	4	3	5	6	4	2	2	4	4	4	2
SV	4	2	1	0	1	1	1	0	0	0	0	1	1	2	1
TV	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1
TW	80	30	29	28	29	27	26	29	28	28	29	30	29	28	29
US	144	32	30	30	30	31	32	31	30	30	31	32	32	32	30
VU	27	5	1	1	1	2	4	3	2	2	3	4	3	4	1
Totals	1129	255	224	222	229	211	217	215	181	178	192	225	225	221	224

Table 3 – Available ROP Purse Seine Observer Placement information by fleet Jan - Dec 2019

*Data as available 2nd September 2020

Data and monitoring through the ROP of the Commission's CMMs intended to minimize impacts of fishing on species of special interest including non-target species

Whale Shark Interactions in purse seine fisheries as reported by ROP Observers

19. Whale shark interactions between purse seine vessels in the 'WCPO' have been monitored by Pacific Island observer programmes since the early 1990's, and the CMM 2012-04 (to be replaced by 2019-04 on 1st Nov 2020) prohibits deliberate setting on whale sharks and requires best efforts be made to ensure safe release where an encirclement occurs. Table 4a shows the number of whale shark interactions and landings for 1236 purse seine trips reported from ROP data entered for 2019. Table 4 (next page) shows previous year's figures reported from the date of the first implementation of CMM 2012-04. Annex A, Table II provide a summary of the outcomes of investigations by flag CCMs of ROP observer reported interactions with whale

sharks based on ROP observer data that were notified for flag CCM investigation in the WCPFC online compliance case file system, for the period 1 January 2016 - 18 June 2020.

Year	Interactions/Landings		Trips analyzed for yearly ROP Annual Report	No's of Vessels that caught Whale Sharks	No's of Sets that Whale Sharks were reported
2012	5 th	366	1194	133	326
2013	6 th	365	1404	146	360
2014	7 th	370	1491	137	329
2015	8 th	374	1433	139	350
2016	9 th	161	1338	81	160
2017	10 th	160	953	73	134
2018	11 th	188	1392	89	178
2019	12 th	347	1236	134	333
Total 2012-2019		2331	10441		2170

Table 4 Observer Reported Whale Shark Interactions and Landings from 2012-2019*

* Data entered as of August 31st, 2020 ** Figures for each previous year have been adjusted as data is entered

20. During 2019 ROP observers reported 91 whale sharks landed on deck; most were of a small size and came aboard in the brail. There were 256 interactions (generally these are larger sharks) with the net reported during the sets. There were 239 sharks discarded after landing and or released from the net alive; all were expected to survive. Of the 347 landed or interacted 22 were recorded as deceased. Two of these were recorded as approximately10 ton in size, with one at 7 ton, one at 5 tons, one at 4 ton, the rest (17) of the deceased whale sharks were all under 1 ton in size.

Table 4a - Whale Shark 'Landings and Interactions' for 2019*

Activity	Total Number	Released/ Escaped Alive and Healthy	Released Alive injured or Distressed	Alive Unknown Condition	Deceased	Unknown
Landings	91	20	26	22	14	9
Net Interactions	256	94	99	39	11	13
Total	347	114	125	61	25	22

Data entered as of August 31st, 2020

Seabird fishery interactions as reported by ROP observers for 2019

21. Table 5 shows available 2019 Observer data collected by observers from Fiji, Hawaii, French Polynesia, Japan, New Caledonia New Zealand, Chinese Taipei and Vanuatu which indicates that 1768 birds were recorded as caught and landed on 778 longline trips carried out in 2019. The data shows that observers confirmed 1696 deceased and 49 released alive. The latitudinal coverage of the longline observed caught birds is given in the tables. During analysis of the data it was noted that 94 different vessels caught the birds with two vessels catching 785 birds (506 & 279) both these vessels were reported to be using tori poles during 2019. The increased training of observers plus new bird manuals for bird identifications has expanded the naming of the species caught or sighted by observers.

Gear	Species	Number Caught	Alive	Dead	Unknw Cond	<23N >30S	<30S	>23N
LL	Albatross Nei	60	7	52	1	1	8	51
LL	Antarctic Giant Petrel	1		1			1	
LL	Antipodean Albatross	2		2		2		
LL	Birds Unidentified	10		10		9	1	
LL	Black-Footed Albatross	232	18	214		22		210
LL	Black Browed Albatross	39		39		39		
LL	Black Browed Mollymawk	5		5		1	4	
LL	Brown Booby	3		3		3		
LL	Buller's Albatross	376	5	365	6	3	373	
LL	Campbell Albatross	52		52		1	51	

 Table 5. Observer Reported 2019 Seabird Bycatch

6		Number			Unknw			
Gear	Species	Caught	Alive	Dead	Cond	<23N >30S	<30S	>23N
LL	Flesh Footed Shearwater	4		2	2		4	
LL	Gibson's Albatross	7		7			7	
LL	Grey Headed Albatross	1		1			1	
LL	Gulls Terns and Skuas	1		1		1		
LL	Laysan Albatross	415	13	400	2	2	1	412
LL	Light Mantled Sooty Albatross	2		2			2	
LL	Parkinson Petrel	5		5		1	4	
LL	Petrels and Shearwaters	7		7		6		1
LL	Short Tail Shearwater	1		1		1		
LL	Shy-Type albatross	328	5	323			328	
LL	Storm petrels	1			1	1		
LL	Wandering Albatross	40	1	39		1	39	
LI	Wedgetail Shearwater	1		1		1		
LL	Westland Petrel	17		14	3	1	16	
LL	White Capped Albatross	43		39	4		43	
LL	White chinned Petrel	115		111	4	1	114	
	Longline Total Birds Caught	1768	49	1696	23	97	997	674

* Data entered as of August 31st, 2020

22. Observers reported 3597 sightings (Table 6) on longliners with Laysan, Black Footed and Wandering Albatrosses being the most predominant sighting. On purse seiners, observers did not record any interactions or landings but did record 3545 sightings between 23N to 30S. Unlike longliners, purse seiners which fish mainly in the equatorial waters sighted few albatrosses but many terns skuas and petrels were sighted. It is noted that the overall sightings of bird numbers are difficult to record for accuracy, as often the same bird is counted many times over the period of a trip.

Table 6. Longline Observer 2019 Seabird Sightings;

Gear	Species	Sighted	<23N >30S	<30S	>23N
LL	Albatross nei	21	21		
LL	Black-Footed Albatross	1133	84		1049
LL	Boobies & Gannets	145	143	1	2
LL	Gulls, Terns and Skuas	271	221	50	
LL	Laysan Albatross	1006	146	4	856
LL	Light Mantled Sooty Albatross	1	1		
LL	Petrels and Shearwaters	419	419		
LL	Wandering Albatross	527	64	450	13
LL	Wedge tailed shearwaters	36	36		
LL	White Chinned Petrel	3	3		
LL	Bird (Unidentified)	35	2	20	13
	Longline Total Birds Sighted	3597	1140	525	1933

Table 6a Purse seine Reported Seabird Sightings

Gear	Species	Sighted	<23N >30S	<30S	>23N
PS	Albatross	40	40		
PS	Black-Footed Albatross	35	35		
PS	Boobies & Gannets	103	103		
PS	Gulls, Terns and Skuas	2167	2167		
PS	Laysan Albatross	7	7		
PS	Petrels and Shearwaters	1193	1193		
	PS Total Bird Sightings	3545	3545		

*Data entered as of August 31st, 2020

Table 7 and 7a (next page) shows recorded observer seabird catches since the first seabird measure, (CMM 2012-07 for Mitigating Impacts of Fishing on Seabirds). The table indicates that observations in the 2012-2014 period was low compared to later years this is because most observers in many programmes had little training and ID guides to assist in that period. The increase from 2015 was most likely due to manuals,

and training updates in many programmes to include improvements in seabird observations. Albatross and petrels are the predominant species caught on longliners.

	Albatross								Petrel & Shearwaters							
Year	Total	Α	%	D	%	U	%	Total	Α	%	D	%	U	%		
2012	140	0	0	76	54	64	46	11	0	0	6	54.5	5	45.5		
2013	136	6	4	90	67	40	29	17	0	0	15	88	2	12		
2014	118	13	11	71	60	34	29	19	3	16	13	68	3	16		
2015	879	46	5.2	802	91.3	31	3.5	113	5	4.4	101	89.4	7	6.2		
2016	1470	71	4.8	1376	93.6	23	1.6	180	9	5	155	86	16	9		
2017	522	61	11.7	449	86	12	2.3	52	0	0	44	84.6	8	15.4		
2018	561	28		519		25		81	0		79		2			
2019	1602	49	3.1	1540	87.1	8	0.5	143	0	0	142	99.3	1	0.7		
Total	5285	274		4785		221		567	17		507		43			

Tables 7 and 7a Total* Catches of Identified Birds since implementation of CMM 2012-07

Table 7a

	Gulls Terns Skua									Boobie	s and G	Gannets						
Year	Total	Α	%	D	%	U	%	Total	Α	%	D	%	U	%				
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2013	3	0	0	2	67	1	33	2	1	50	1	50	0	0				
2014	2	0	0	2	100	0	0	2	2	100	0	0	0	0				
2015	2	0	0	0	0	2	100	2	1	50	1	50	0	0				
2016	0	0	0	0	0	0	0	1	1	100	0	0	0	0				
2017	5	0	0	3	60	2	40	5	1	20	2	40	2	40				
2018	1	0	0	1	0	0	0	1	0	0	1	100	0	0				
2019	1	0	0	1	100	0	0	3	0	0	3	100	0	0				
Total	14	0		9		5		16	6		8		2					

*Data entered as of August 31st, 2020 **Figures for each previous year have been adjusted as data is entered

Sea turtle interactions as reported by ROP observers

24. 2019 observer data from 1236 Purse seine trips and 778 longline trips indicates there were 503 observed turtle landing and non-landed interactions on purse seiners and on longliners. Table 8 shows the number of reported landings/interactions and life status of the turtle when released or discarded on longliners. Many long- line caught turtles were deceased when landed, of the 391 reported caught by observers on longliners, 231 were released alive while 149 were deceased on landing; crews generally assisted with the recovery of any live turtles bought on board longline vessels. Table 8a shows that there were 2 deaths recorded by purse seine observers from 112 turtles caught; observers reported that if turtles were seen in the net, the crew often assisted the turtles out of the net before landing. If brailed aboard and landed on deck turtles were in most cases carefully handled and were generally released in the same or in better condition than when landed.

Gear	Species	Number Observed	Retained	Number Discarded Alive	Number Discarded Dead	Unknown Condition	Released Alive before landing
LL	Flatback Turtle	2	0	0	2	0	0
LL	Green Turtle	57	1	33	22	1	10
LL	Hawksbill Turtle	15	0	7	8	0	6
LL	Leatherback Turtle	16	0	9	7	0	7
LL	Loggerhead Turtle	184	0	158	23	2	152
LL	Marine Turtle	14	0	7	3	4	6
LL	Olive Ridley	103	0	17	84	2	15
L	ong-Line Turtles Caught 2019	391	1	231	149	9	196

Gear	Species	Number Observed	Retained	Number Discarded Alive	Number Discarded Dead	Unknown Condition	Released Alive before landing
PS	Flatback Turtle	0	0	0	0	0	0
PS	Green Turtle	32	0	26	0	6	7
PS	Hawksbill Turtle	14	0	13	0	1	6
PS	Leatherback Turtle	1	0	1	0	0	0
PS	Loggerhead Turtle	36	0	29	2	2	10
PS	Marine Turtle	0	0	0	0	0	0
PS	Olive Ridley Turtle	29	0	28	0	1	18
PS Turtles Caught 2019		112	0	97	2	13	41
LL &	Total Turtles PS Caught in 2019	503	1	328	151	19	237

 Table 8a Purse-seine Turtle landings and interactions for 2019

*Data entered as of August 31st, 2020

25. Tables 9, 9a, & 9b represents turtles observed by observers on purse seine and longline vessels between 2012-2019. During that period, it is noted that a large majority of turtles caught by purse seiners were returned to the sea alive and in a reasonable condition. Most deceased turtles were from long lining and in nearly all cases the turtle was deceased before landing. For years 2012-2014 there were a small number of turtles retained, no reason is given to why? A total of 3814 turtles were observed in the period 2012–2019 with the most predominant species caught being Olive Ridley, Logger Head and Green Turtles.

Tables 9- Flatback, Green and Hawksbill Turtle observed in the period 2012-2019

	-								-					_
Year	Flatback	Α	D	U	Green	R	Α	D	U	Hawksbill	R	Α	D	U
2012	5	4	0	1	68	5	49	5	9	32	0	25	5	2
2013	9	5	3	1	120	5	87	12	16	65	0	51	7	7
2014	6	2	3	1	78	5	52	10	11	70	1	52	9	8
2015	7	7	0	0	96		79	13	4	28	0	22	5	1
2016	6	5	1	0	61		42	15	4	31	0	22	7	2
2017	3	3	0	0	74		40	14	20	29	0	20	9	0
2018	5	3	2	0	126		72	52	2	54	0	43	9	2
2019	2	0	2	0	89	1	58	18	11	29	0	20	7	2
Total 2012-19	43	29	10	4	711	16	478	117	99	338	1	255	58	24

Table 9a Leatherback, Loggerhead & Olive Ridley Turtles observed 2012-2019

		/	00	1	1	-		-		-					_
	Leather-	[[[Logger	[[[Olive			[[
Year	back	R	Α	D	U	-head	R	А	D	U	Ridley	R	А	D	U
2012	19	2	10	1	6	62	3	43	6	10	129	1	67	47	14
3013	39	2	18	2	17	81	1	59	6	15	112	0	69	27	16
2014	34	1	14	0	19	63	5	38	7	13	59	0	34	15	10
2015	29	0	19	6	4	131		54	7	70	142	1	62	65	14
2016	28	0	17	0	11	145		112	15	18	139	0	45	38	56
2017	34	0	16	1	17	73		56	11	6	176	0	57	86	33
2018	43	0	25	14	4	141		120	19	2	256	0	59	193	4
2019	17	0	10	1	6	220		187	25	8	132	0	45	84	3
Total 2012-19	243	5	129	14	95	916	9	669	95	143	1143	23	433	511	206

*Data entered as of August 31st, 2020 **Figures for each previous year have been adjusted as data is entered

26. During the period 2012-2019, a couple of observers programme observers did not identify turtles to species level and only indicated a turtle was captured and released on board purse seine and longline vessels. These unidentified turtles have been included for your information in Table 9b (next page).

Year	Unidentified	R	Α	D	U
2012	6	0	4	2	0
2013	8	0	4	0	4
2014	7	0	5	0	2
2015	33	0	1	0	32
2016	86	0	73	1	12
2017	117	1	104	12	0
2018	129	0	118	9	2
2019	14	0	7	3	4
Total 2012-2019	400	1	316	27	56

Table 9b Unidentified Turtles 2012-2019

These unidentified turtles represent the turtles seen by observers and they were unable to positively identify them. This was probably due to a few observer programmes not having proper manuals to assist them and the observers used the generic codes for turtles rather than the individual species codes. There is a good on-deck manual for turtles produced by SPC which is now available to all programmes.

*Figures for each previous year have been adjusted as data is entered

Sharks (other than Whale Shark) fishery interactions as reported by ROP Observers

27. Two CMMs with a no-retention requirement have been adopted by the Commission CMM 2013-08 (Silky Sharks), and CMM 2011-04 (Ocean White Tip Sharks). Noting that these two CMM's will be replaced by CMM 2019-04 on 1st Nov 2020. Table 10 shows figures for 2019 silky shark catches and indicates that 42% silky sharks caught on purse seiners were reported as "Alive" when caught in the nets but by the time they were released or discarded only 30% were reported alive. For a small number of catches on purse-seiners the numbers of Silky sharks observed were in the hundreds and observers found difficulty in counting the exact number, so estimates were made on the catch reported. For longliners 70% were alive when caught and landed. 39% were discarded alive. ROP observer data and the associated reports continue to be a source of information for potential alleged infringements that are presently notified by the Secretariat for investigation by flag CCMs in the WCPFC online compliance case file system. Annex A Table III provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged incidents related to retention of oceanic white tip sharks, retention of silky sharks and shark finning activity by vessels, based on ROP observer data that were notified for flag CCM investigation in the online compliance case file system, for the period 1 January 2015 – 18 June 2020.

2019 Period 01-Jan to	Period 01-Jan to Caught Fins Caught				Conditior Caught		(Cut fr ore lar	Unhooked Before Landing			
31-Dec	Caught	Retain	+ Fins	Α	D	U	Α	D	U	Α	D	U	
Purse- seine	59763	13	21	25415	18384	15963	16843	39163	3722	0	0	0	
Longline	3688	1	0	2256	861	30	1100	910	1138	356	21	164	11
Total A D U				27671 19245 15993			17943 40073 4860			356	21	164	11
Total Catch	63451	14	21	62910			62876				541	11	

Table 10 Silky Shark Catches 2019

*Data entered as of August 31st, 2020

28. Table 11 on the next page indicates catches of silky sharks since 2012 to 2019 and shows that that reporting of shark finning and retention has decreased markedly, however there was a couple of vessels where observers reported shark finning or the retention of the shark in 2019. The alive status of released Silky sharks has also increased since the implementation of the CMM 2013-08 from 0.8% in 2013 to 29% in 2019.

Table 11 Silky Shark Catches 2012-2019

2012-2019 Silky sharks	Estimated Number	Discarded Body, Fins	Retained Body, Fins	Conditio	n when Cut/S Discarded	truck off or	Cut/Struck off / Esc before	% Alive released
-	Caught	Retained	Whole	Alive	Dead	Unknown	landing	
2012	29070	2024	3540	134	119	28817	99	0.8
2013	36713	3120	2421	141	165	36407	133	0.8
2014	41580	994	1372	1203	3125	37352	581	4.3
2015	38763	334	569	5218	20404	13141	372	14.4
2016	52521	130	361	7867	34800	9854	1122	17.1
2017	49256	27	154	14417	27545	7594	900	33
2018	54922	32	58	17011	32896	5015	773	32.4
2019	63451	14	21	17943	40073	4860	541	29.1
2012-2019	366276	6675	8496	63934	159127	143040	4521	18.6

* Data entered as of August 31st, 2020 **Figures for each previous year have been adjusted as data is entered.

29. Table 12 & 12a show the totals for observer reports for the years since the CMM 2011 - 04 (Ocean White Tip Sharks) became effective from Jan 1st, 2013. The table figures indicate that both the reporting and adherence to the CMMs measures has improved since the implementation in 2013. The processing of ocean white tip sharks has been reduced to 6 reports of fins being removed from the shark before being discarded in 2019.

Table 12. Ocean Whitetip Sharks (2019)

2019 Period 01-Jan to	Discard Number Body,		Retain Body	Condition Caught				Conditior Discarde		LL Cut free before landing				
31-Dec	Caught	Fins Retain	Whole + Fins	A	D	U	A	D	U	Α	D	U		
Purse- seine	712	2		439	159	114	351	273	88	0	0	0		
Longline	923	4		706	200	17	562	258	103	81	11	8		
Total A D U				1145	359	131	913	531	191	81	11	8		
Total Catch	1635	35 6			1635			1635			100			

* Data entered as of August 31st , 2020

Table 12a Ocean Whitetip Sharks 2012 to 2019 data

2014-2019 Oceanic White	Estimated Number	Discarded Body, Fins	Retained Body, Fins	Conditio	n when Cut Discarde	:/Struck off or ed	Cut/Struck off / Esc before	% Alive
tip Sharks	Caught	Retained	Whole	Alive	Dead	Unknown	landing	released
2012	848	48	91	231	160	457	108	27
2013	880	73	65	117	132	631	157	13
2014	904	25	46	129	108	667	236	14
2015	1179	10	5	594	339	246	143	50
2016	1297	2	1	403	273	621	272	31
2017	1249	0	1	460	310	478	140	36
2018	1943	10	2	807	1015	121	188	41
2019	1635	6	0	913	531	191	100	56
2012-2019	9654	174	218	3662	2821	3095	1351	252

* Data entered as of August 31st, 2020 ** Figures for each previous years report have been adjusted as data is entered

Cetacean interactions in purse seine fisheries as reported by ROP Observers

30. Many varied species of whales, dolphins and a species of seal were observed by ROP observers. The SPC produced 'On Deck ID Guides' allowed for a more accurate identification of each animal. Fur seals, false killer and toothed whales were the predominate species interacting or being caught by longliners, whereas purse seine observers recorded 19 different species with the predominance being Brydes Whales, False Killer Whales, Short Finned Pilot Whales, Rough Toothed and Bottle Nose Dolphins.

31. Table 13 on the next page shows Cetacean interaction data from 1236 Purse seine trips and 778 longline trips. There were 86 interactions or landings with longliners; most were released alive, however 17 were deceased when discarded. Purse seine observers recorded 1042 interaction or landings, 395 escaped or

were crew assisted releases, another 647 interactions or landings with purse seiners were reported by observers, with the main species reported caught being 328 False Killer Whales with 60 being deceased when discarded, 220 Rough Tooth Dolphins with 136 reported deceased when discarded and 97 Brydes whales caught or released with 3 deceased when discarded.

Species	PS	u	Assisted Alive	, Cut-off, d Escape before ding	lan	cted or ded ed Alive)		cted or I Dead	Conditio	nown on when arded
Antarctic Fur Seals		32				25		7		
Beaked Whales Unidentified		1		1						
Blue Whale	3				3					
Bottle Nose Dolphin	65		24		16		25			
Brydes Whale	97		43		34		3		17	
Common Dolphin	29				19		10			
Cuvier Beaked Whale	1		1							
Dolphins unidentified	6	1	2				4			1
Fin whale	3		1		1				1	
False Killer Whale	328	13	113	9	117	4	60		38	
Ginko Toothed Beak Whale	4		4							
Humpback Whale	4		1		3					
Ind/Pac Bottle Nose Dolphin	70	2	36	1	6	1	19		9	
Melon Headed Whale	24	1	7		2		4	1	11	
Pan Tropical Spotted Dolphin	18	3	11	1			7	2		
Pygmy Sperm Whale	6		5						1	
Pygmy Killer Whale		1				1				
Rough Tooth Dolphin	220	8	65	5	19	1	136	2		
Risso's Dolphin	4	2	3		1			2		
Sei Whale	60		30		27		2		1	
Seals unidentified		1				1				
Short Finned Pilot Whale	41	1	16		23	1	1		1	
Spinner Dolphin	47		25		11		11			
Striped Dolphin	9		5				4			
Toothed Whales	3	16	3			14		2		
Unidentified Whales		4				2		1		1
Totals	1042	86	395	17	282	50	286	17	79	2

Table 13. Whale, Dolphins, Seals reported by observers,

* Data entered as of August 31^d, 2020

32. Observers reported several animals were entangled in the purse seine nets and that on most vessels, crew made efforts to release them. In several instances, the crew assisted in getting animals from the purse seine net before brailing began, and a few escaped by breaking through or jumping over the net.

33. Table 14 on the next page shows total purse seine and longline Cetaceans caught since 2012 to 2019, and should be reviewed considering available observer coverage in the respective fisheries. In the purse seine fishery where there is 100% purse seine coverage, there is a declining trend in reported interactions over time. In the longline fishery there are lower levels of observer coverage.

Year	Total caught or interacted each year		Retained		Escaped, Cut-off, Assisted Escape Alive before Landing		lan	cted or ded ed Alive)	Interac landed		Unknown Condition when Discarded	
Gear Type	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL
2012	2527	49	0	0	0	1	2241	15	224	6	62	27
2013	4009	76	0	13	8	2	3362	42	556	8	83	11
2014	3373	86	0	1	0	4	3077	70	159	3	137	8
2015	2219	97	0	0	0	0	1995	70	181	7	43	20
2016	1453	44	0	0	14	0	1308	39	99	2	32	3
2017	841	89	0	0	130	16	587	22	89	7	35	28
2018	887	56	0	0	266	0	303	34	179	13	139	9
2019	1042	86	0	0	395	17	282	50	286	17	79	2
Totals 2012-												
2019	16351	567	0	14	813	40	13155	342	1773	63	610	108

Table 14 Total Cetaceans caught from 2012-2019

* Data entered as of August 31st, 2020 ** Figures for each previous year's report have been adjusted as data is entered

34. The observer reports indicate a small number of interactions with cetaceans by vessels that may not be following CMM requirements. ROP observer data and the associated reports is a source of information for alleged infringements that are presently notified by the Secretariat in the WCPFC online compliance case file system. Annex A, Table II provide a summary of the outcomes of investigations by flag CCMs of ROP observer reported interactions with whale sharks based on ROP observer data that were notified for flag CCM investigation in the WCPFC online compliance case file system, for the period 1 January 2016 - 18 June 2020.

Authorised observer providers to the ROP and update on ROP audits

35. A list of ROP authorised observer programmes and their National Observer Coordinator contacts are available on the WCPFC website (http://www.wcpfc.int/regional-observer-programme); National Observer programmes are reminded of the requirement (CMM 2018-05 paragraph 13) to keep the Secretariat informed of any changes to contact information for coordinators. The list has also been made more member friendly so that members can update their own information through their national CCM portal on the WCPFC website, however the Secretariat has observed that observer programme contact information was infrequently updated by programmes. The ROP Observer Coordinators list is an extremely important list of contacts for observers, vessels, fishing companies and flag states, and members are urged to ensure their observer programme contacts remain current and up to date.

36. The Secretariat continues to audit required minimum standards in ROP observer programmes and has completed the 2nd phase of audits and started the 3rd phase in 2019. It was intended to visit countries due for audit in 2020 including Fiji, Kiribati, Tonga, Nauru, Republic of Korea and USA. However, the "COVID-19" pandemic has prevented that from happening. At the time of writing (August 2020) an online audit procedure has been developed and three audits have been completed, whilst this is not the same as a face to face visit to discuss the programme and any issues involved in the operations, training and observer safety of the observers in the respective programmes, this online procedure may nonetheless assist as an interim solution.

37. The Pacific Island ROPs managed to supply most observers on purse seiners in 2019, however with 5% coverage rate of longliners and 100% coverage of carriers transhipping in the high seas, as well as the usual attrition rate that occurs in observer programmes, training continues to be necessary for most observer programmes on a continual basis. There have been many observers trained over the years and many have remained with the programmes, but a substantial number have left for several reasons, and the availability in all countries continually needs to be updated. Funding for training remains an issue in some countries and allowances in local observer budgets need to be made to fund observer training courses.

38. The COVID-19 pandemic has stopped training in most countries, and there may be a problem with the number of required observers when regular placements recommence. Currently (August 2020) there is an exemption for vessels to not to have to carry an observer if they are unable to source an observer because of problems associated with the Covid 19 pandemic. When things return to the coverage rates required by the Commission, there will need to be training sessions to get numbers of available observers to the levels needed to satisfy the required coverage rates.

ROP Compliance related matters

Observer Trip Monitoring Summary

39. The "Observer Trip Monitoring Summary" is part of the minimum data standards of the Commission; the Pacific Island observer programmes use workbooks that contain a general form "GEN -3" that is used as a "Trip Monitoring Summary". The form is not a written report but is an indicator of activities allegedly carried out by vessels and witnessed by the observer. The observer indicates by circling 'YES or NO" to the questions on the form. A response of 'YES' is an indicator only and does not indicate that there has been any infringement by a vessel. The observers will include in their written report the reasons "Yes" were circled. Table 15 below represents data available from 1026 Purse seine and 778 longline trips across all fishing fleets for 2019. The data shows the number of reports made by observers when "Yes" was indicated. Of concern are trips where observers reported obstruction, intimidation and interference and not being accommodated properly; 46 Purse seine and 20 Longline (RS-a, RS-b, RS-d) reports were made by observers. There were also a high percentage of inaccurately recording in vessel logs for retained target (36%) and bycatch species (23%) as well as discards of target (61%) and bycatch species (57%) recorded by observers.

40. At WCPFC14, the Commission noted that TCC13 did not consider the information contained in the ROP Pre-notification List for assessing any obligations for which it was relevant, except for those cases related to observer interference or obstruction. WCPFC14 approved that this process be followed in future years.

41. Advance notification to flag States of alleged infringements reported on observer trip monitoring summary continues is delivered through the Observer Obstruction Alleged Infringement list and the Prenotification list both of which are maintained in the WCPFC online compliance case file system. Annex A Table IV provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged observer obstruction incidents notified in ROP observer data for the period 1 January 2015 – 18 June 2020. Table V in Annex A provides an updated summary of the outcomes of investigations by flag CCMs of ROP observer reported pre-notification incidents (other than alleged observer obstruction incidents) for the period 1 January 2016 – 18 June 2020.

	Observer Trip Monitoring Summary											
GEN-3 Codes	Item	PS	LL	% of Trip								
Observer	1											
RS -a	Did the operator or any crew assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observers in the performance of their duties	16	8	1.6	1							
RS -b	Request that an event not be reported by the observer	16	4	1.6	.5							
RS -d	Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable	14	8	1.4	1							
National	Regulations											
NR-a	Fish in area16s where it is not permitted to fish	14	0	1.4	0							
NR-c	Use a fishing 3method other than the method the vessel was designed or licensed	24	1	2.3	.1							
NR-e	Transfer or tra3nsship fish from or to another vessel	46	23	4.5	3							
NR-g	fail to stow fish4ing gear when entering areas where they were not authorized to fis1h;	36	3	3.5	.4							
WCPFC CN	//Ms											
WC-a	Fail to comply with any Commission Conservation and Management Measures	161	3	16	.4							
WC-b	High-grade the catch	17	9	1.7	1.6							
	Recording Position & Catch	17	5	1.7								

Table 15.	2019 Observer	· Trip Monitor	ing Summary	y Indications.	*Data entered as of August 31st, 2020
-----------	---------------	----------------	-------------	----------------	---------------------------------------

Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	12	1	1.2	.1
Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)	12	3	1.2	.4
Inaccurately record retained 'Target Species" in the Vessel logs	318	41	31	5.3
Inaccurately record 'Target Species" Discards	536	66	52	8.5
Record species inaccurately	503	3	49	.4
inaccurately record By catch species discards;	474	90	46	11.6
Inaccurately record retained bycatch Species.	173	46	17	5.9
f Special interest				
Interact with non-target species	499	122	49	15.7
Dispose of any metals, plastics, chemicals or old fishing gear	159	29	15.5	3.7
Discharge any oil	45	7	4.4	.9
Lose any fishing gear	4	20	.4	2.6
Abandon any fishing gear	37	4	3.6	.5
Fail to report any abandoned gear	13	1	1.3	.1
Fail to monitor international safety frequencies	3	2	.3	.3
	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas) Inaccurately record retained 'Target Species" in the Vessel logs Inaccurately record 'Target Species" Discards Record species inaccurately inaccurately record By catch species discards; Inaccurately record retained bycatch Species. F Special interest Interact with non-target species Dispose of any metals, plastics, chemicals or old fishing gear Discharge any oil Lose any fishing gear Abandon any fishing gear Fail to report any abandoned gear	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)12Inaccurately record retained 'Target Species" in the Vessel logs318Inaccurately record 'Target Species" Discards536Record species inaccurately503inaccurately record By catch species discards;474Inaccurately record retained bycatch Species.173 F Special interest 12Interact with non-target species499Dispose of any metals, plastics, chemicals or old fishing gear45Lose any fishing gear4Abandon any fishing gear37Fail to report any abandoned gear13	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)123Inaccurately record retained 'Target Species" in the Vessel logs31841Inaccurately record 'Target Species" Discards53666Record species inaccurately5033inaccurately record By catch species discards;47490Inaccurately record retained bycatch Species.17346 F Special interest 12122Dispose of any metals, plastics, chemicals or old fishing gear15929Discharge any oil457Lose any fishing gear420Abandon any fishing gear374Fail to report any abandoned gear131	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)1231.2Inaccurately record retained 'Target Species" in the Vessel logs3184131Inaccurately record 'Target Species" Discards5366652Record species inaccurately503349inaccurately record By catch species discards;4749046Inaccurately record retained bycatch Species.1734617F Special interest1224912249Dispose of any metals, plastics, chemicals or old fishing gear4574.4Lose any fishing gear420.4.420Abandon any fishing gear3743.6.1.1Fail to report any abandoned gear1311.3.1

Summary of counts of cases notified in the 'WCPFC Online Compliance Case File System' based on ROP observer data

42 As has been noted previously Annex A provides a summary of counts of cases notified based on ROP observer data that were notified for flag CCM investigation pursuant to Article 25 of the Convention, for the period 1 January 2015 – 18 June 2020. There are five ROP-observer data based WCPFC online Compliance case file system lists: FAD Sets Alleged Infringements; Observer Obstruction Alleged Infringements; Shark Catch Alleged Infringements; ROP Pre-notification Issues; and Cetacean and Whale Shark purse seine fishery Interactions. Updates to the ROP observer data related compliance case lists are made periodically, and through procedures that have been developed in joint-efforts of the Secretariat and SPC-OFP staff. The creation of cases is in part through scripted queries that the Secretariat runs over the ROP observer data. The frequency of updates depends on the frequency with which updates from SPC-OFP can be provided to the Secretariat (currently the frequency for updates is one to three months).

43 Annex A Table I provides the annual counts cases based on ROP observer data and notified for flag CCM investigation for the period 1 January 2015 – 18 June 2020. This summary confirms that some CCMs appear to have issues with obtaining the ROP observer report necessary to complete their flag CCM investigations cases notified in the 'WCPFC Online Compliance Case File System' based on ROP observer data.

Review of ROP implementation by applicable CCMs under the Compliance Monitoring Scheme (CMS) 2014 - 2019

44. Figure 1 below provides an overview of the outcome of the evaluation of ROP-related obligations under the CMS over recent years. Previously CMM 2007-01 now replaced by CMM 2018-05 indicates the implementation of observer coverage requirements that has been evaluated annually by the Compliance Monitoring Scheme since 2013 for the Reporting Year 2012 (RY2012) to 2019 (RY2018). For example, CMM 2007-01 paragraph 13 (now CMM 2018-05 paragraph 13) shows that consistently most ROP observer programs have provided some advice of their points of contact for their programmes. In recent years there has been small improvements in the implementation by applicable flag CCMs of ROP observer coverage requirements, just over half of applicable flag CCMs are fully implementing the longline ROP coverage rate of 5% and/or associated reporting requirements. There is improvement in recent years for CMM 2018-05 paragraph 15(g) (formerly CMM 2007-01 paragraph 14(vii)) since the notification of "observer obstruction alleged infringements" through the WCPFC online compliance case file system



Observer Safety Matters

45. Since 2017, the WCPFC has had a dedicated CMM for the 'Protection of WCPFC Regional Observer Programme Observers' (CMM 2016-03/2017-03) and indicate the requirements that observer providers, flag States and vessels are to follow if an observer dies, is missing or presumed fallen overboard, suffers from a serious illness or injury that threatens his or her health or safety, or if an observer has been assaulted, intimidated, threatened, or harassed such that their health or safety is endangered.

46. To date there have been 5 incidents reported to the Secretariat in reference to CMM 2017-03 and related to 2017 and for early 2020 calendar year: 3 incidents related to the calendar year 2017 and 2 for 2020. A summary of reported incidents and the flag CCM investigation response is provided in Table 16 below

Table 16: Summary of outcome of flag CCM investigations of alleged infringements related to observer safety	
and CMM 2016-03/2017-03	

Row Tables	Flag CCM Notified	Flag CCM Investigation Completed No infraction	Grand Total
CMM 2016-03-03-06	2	1	3
2017	2	1	3
CMM2017-03-03-06	1	1	2
2020	1	1	2
Grand Total	3	2	5

47. To support the implementation of CMM 2016-03/17-03; WCPFC13, agreed on new minimum standards adopted for 'Regional Observer Programmes' to support safety of observer which commenced in February 2017. The Secretariat has been checking during ROP audits and other opportune national visits that Observer Programmes are duly ensuring that the safety measures for observers are in place. It has been found that the standard agreed upon for the use of two-way devices was well supported and introduced in many of the ROP's by the date of required implementation. However, there are still a couple of programmes who have issued good communication devices such as independent satellite phones but have not issued waterproof Personal Locater Beacons PLB's. These programmes were recently reminded about the requirements of the agreed standards adopted by the commission for the ROP.

48. CMM 2017-03 Para 14 states "The Technical and Compliance Committee and the Commission will review this Conservation and Management Measure no later than 2019, and periodically thereafter.

Notwithstanding this provision CCMs may submit a proposal to amend this CMM at any time." To date there has been no changes to CMM 2017-03.

Support from the Secretariat to National and Regional Observer programmes

49. The Secretariat (ROPC) attended the Regional Observers Coordinators Workshop (ROCW) 10th to 15th February 2020 hosted by the Fisheries Division in Funafuti, Tuvalu. This workshop was attended by many observer programme, however a couple of programmes were unable to attend because of early restrictions put on their staff to travel because of the COVID-19 travel restrictions. Coordinators that attended discussed many issues regarding observer operations. including cost recovery, observer safety and safety equipment, travel issues, Pacific Island Regional Fisheries Observer (PIRFO) updates, briefing and debriefing issues, observer training, data collection issues and a presentation on observer carrier transhipment. The Secretariat's Regional Observer Programme Coordinator made a presentation and explanation to the meeting on the role of observers in all the new CMM's approved at WCPFC16 in Port Moresby. The closing function was attended by the Prime Minister of Tuvalu the honorable Kausea Natano; he spoke on the importance of observer roles in monitoring fishing vessels as well as the importance to Tuvalu in the employment of Tuvaluans as observers.

50. In late 2019, the Secretariat's ROP Coordinator took part in the programme to review the training of observers in both Indonesia and Vietnam though the West Pacific Asia Project / Improved Tuna Monitoring (WPEA / ITM). The first training session of Vietnamese observers was carried out in Nha trang where observers were trained by SPC and WCPFC for both purse seine and longline coverage noting that Vietnam has different several different gear types fishing for tuna and many different ports that observers would be required to cover in future training. During the training ROP formats and forms were developed by SPC trainer and WCPFC ROP Coordinator for the Vietnam Programme to be used in their coverage.

51. Indonesia already has established observer programmes and a review of the existing Indonesian national observer programmes in relation to WCPFC standard, observer programme operations has been held. The meeting discussed a strategy plan commencing in 2019 to 2024, the Indonesian programme wish to train observer debriefers, and specialised observer trainers in that period, as well as retraining many of the current observers on ROP standards & data, however because of the Covid 19 travel restrictions all plans have been halted and require rescheduling when travel commences and safety permits.

52. Initially as part of the first WPEA project Philippines commenced the training of their observers in 2009, since that time they have regularly held training sessions every year and have trained over 570 observers and 28 debriefers to WCPFC standards; during 2019 another 59 observers were trained and added to their list of active observers. SPC data collections, forms and formats are used during the training and by the observers when they collect data on board vessels. The Secretariat has continually assisted with this training programme as part of the project. Philippine observers are used domestically and on the high seas. The programme is well established and is an important section of the Philippines Bureau of Fisheries and Aquatic Resources (BFAR)

Cross Endorsement of ROP Observers to collect data on behalf of other tuna RFMOs

53. There are many observers from Pacific Island countries with IATTC/WCPFC cross endorsement qualifications. These observers can carry out work in both 'Convention Areas' on the same trip, on vessels approved to fish in both convention areas. 'Cross Endorsed' (CE) trained observers are currently in high demand with vessels wishing to cross over to the IATTC area on a regular basis. Observers on these trips operate under the PIRFO formats designed by SPC/FFA and continue to use this format for the complete trip, however when in IATTC waters they may be required to fill forms for IATTC if there is any dolphin catches by a vessel. Observers also need to follow other IATTC weekly reporting requirements, when in the EPO.

54. In 2019 cross endorsement training was held in in Nauru training and was carried out by the Observer Manager/ Trainer from IATTC and assisted by the Secretariat's ROP Coordinator . The course was attended by selected experienced observers from Nauru, Fiji, Tonga, Tuvalu, Cook Island/Samoa and Vanuatu. Observers are trained on the forms and reports that are expected if the purse seine vessel they are observing decides and is approved to cross over into the Eastern Pacific (150W longitude) to fish on the same trip as they have fished in the WCPO. Trainees are shown and tested on the IATTC requirements and are also explained the requirements of the WCPFC ROP. Purse seiners particularly US purse seiners are thq₆

predominant vessels asking for CE certified observers to be placed on their vessels. The CE programme was initiated to save approved vessels from having to carry IATTC observers and a WCPFC ROP observer if the vessel departs from a WCPO port and decide to fish both in the WCPO and in the Eastern Pacific.

55. Table 17 provides information on the numbers of requests and placements that were made for CE trained ROP observers for 2012 to 2020. Noting that a request does not mean the vessel will cross over to the EPO during its trip. The figures in the table 17a indicates the use of CE observers for 2019 and for first months of 2020 and indicates that USA vessels are the major client for certified CE Observers. During 2019 and so far in 2020 there were 73 requests for CE observers however only 29 of these requests resulted in the vessels crossing over to fish in the EPO.

2012 -2020* CE Requests	Ecuador	EL Salvador	Spain	USA
Fiji				19
FSM				6
Kiribati	13	15		43
Nauru			1	4
Marshall Isl.				2
PNG				38
Solomon Isl.				58
Tuvalu				10
Vanuatu			1	23
Total 2012-20	13	15	2	203

Table 17CE Observers requests 2012 to 2020

17a Requests for CE Observers for 2019/2020										
2019/2020* CE Requests	Ecuador	EL Salvador	Spain	USA						
Fiji				11						
FSM				2						
Kiribati				8						
Nauru				3						
Marshall Isl.				0						
PNG				10						
Solomon Isl.				25						
Tuvalu				5						
Vanuatu			1	7						
Total 2019/2020	0	0	1	72						

*Data as recorded by April 2020

56. Table 18 provides a summary of information from IATTC Secretariat on the number of observed trips by ROP observers with CE-training that were used for fishing activities in the waters of the Eastern Pacific Ocean. The table shows the number of trips that were observed by ROP observers with CE- training has been has increased from 2012 to 2020. There was also higher number of requests for placement of CE-trained ROP observers in 2019/20 (73). As is indicated in table 17 and table 18 there was 233 requests for observers in the period 2012 to 2019 but only 104 vessels crossed to fish in the EPO.

 Table 18. ROP Trips that include fishing activities in the waters of the WCPO & EPO by year by flag and Provider

Flag CCM	ROP Provider	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Ecuador	КІ	1	9	3							13
El Salvador	КІ		4	3	3			1			11
Spain	VU									1	1
USA	FFA	1	0	3	7	12	14	14	22	6	79
Total 2012	- 2020	2	13	9	10	12	14	15	22	7	104

*Data as recorded by April 2020

57. A Transhipment Memorandum of Cooperation (MoC) was agreed between WCPFC and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) in 2016 and was subsequently signed in April-June 2017. This MoC provides for High Seas transhipments involving southern bluefin tuna (SBT) to be carried out within the High Seas of the WCPFC Convention Area if observed by CCSBT - endorsed WCPFC Regional Observer Program (ROP) transhipment observers. At the time of writing, the options available to for WCPFC and CCSBT to try to facilitate implementation of the Transhipment MoC were still being progressed.

Implications of COVID-19 Intersessional decisions and travel restrictions – as at 1 September 2020

58. To find out what is happening to personnel normally employed as observers a short survey with 6 questions was conducted with the 25 observer programmes authorised as WCPFC Regional Observer Programmes; we received responses from 20 ROP's.

Q1. How many ROP observers are presently awaiting repatriation following the introduction of the COVID-19 decisions earlier this year

Q2.For each case where an observer is awaiting repatriation, could we have a brief explanation from the Programme as to what are the circumstances eg the observer has chosen to stay on board the vessel, the observer is being accommodated in a foreign country while repatriation is being arranged, and/or there are domestic COVID-19 travel restrictions preventing the return of the observers to their country of origin.

59. As at 1 September 2020, there are 81 observers not back in their home ports; 31 observers are trapped in different foreign ports including Ecuador, Guam, New Zealand, Samoa and other ports trying to find a way back to their home country; a couple have been stranded for nearly 5 to 6 months in foreign ports waiting for their country to open up and travel to commence. Another 50 observers have chosen to remain for extended trips on carriers or fishing vessels as there is no way back if they get off in a foreign port. One observer was placed late 2019 and keeps extending as he has no way home. Many others have completed multiple trips because it is better than being stranded. A few vessels have disembarked observers at their home ports and in one case reported, a purse seiner picked up 4 observers from other vessels and dropped them off in their home port. A couple of other countries are also trying to pick up their observers by using returning vessels. If observers arrive back in their countries, they usually must go through an isolation period.

Q3 Any general comments on whether observers have been able to be redirected within national fisheries departments to undertake other duties.
 Q4. Do any programmes currently have ROP observers continuing in their usual duties?

60. As at 1 September 2020, a few programmes have kept some of their observers engaged with landbased duties where possible and it was reported that observers are being used in port monitoring and as enforcement officers for transhipment vessels in their port to make sure no one boards or leaves the vessel without proper authorisation. One programme transferred some observers to duties with coastal fisheries another used a few of its observers to assist in the construction and maintaining of quarantine sites. However, the main body of observers in their home countries; many who work on a contract basis were not employed. As stated earlier there were 50 observers continuing as observers at sea, a few countries reported that they continue to deploy observers on domestic or locally based foreign vessels that start and end from their same home port.

Q5. Please indicate the number of observers that are unemployed due to the suspension of observer coverage.

Q6. How many observers did the Programme have before the pandemic?

61. Table 19 indicates the number of observers that have been affected by the pandemic from the 20 of the 23-national observer programmes that responded and are authorised by the Secretariat on behalf of the Commission, as at 1 September 2020. As indicated approximately 65 % of observers have lost their source of income with little chance of returning to observer work in the near future.

	i vers uur nig i anuv	line – current as at	1 September 2020	
Programmes responded	Observers before Pandemic	Employed during pandemic	Resigned to take work elsewhere	No Employment during Pandemic
20	1363	450	37	876

Table 19 Observers during Pandemic – current as at 1 September 2020

Secretariat observations

62. The year 2019 showed that the ROP programmes continued to train make observers available to assist flag CCMs with meeting required ROP coverage rates. Reporting and debriefing improved and the these have likely improved the quality of observer reported data. SPC as the data provider should be congratulated in the improvements that have been made with data entering and distribution of reports. Unfortunately, the year 2020 will be like no other and many normal observer roles, trips and travel have been suspended and the next report in 2021 will be interesting.

63. The Secretariat had received requests for additional IATTC/WCPFC cross endorsement training, and IATTC has confirmed their willingness to continue to support these trainings. And one course was held and funded primarily by PNG in January 2020, also there was a request for a course in Tuvalu in August 2020, however the COVID-19 pandemic has caused this training to be withdrawn until a suitable time in the future.

64. Overall, the 25 observer programmes that are part of the Commission ROP operated routinely and within the standards required by the Commission in 2019. The second phase of auditing program was completed in 2019 and the third phase of audits commenced with Solomon's, FFA, Vanuatu observer programmes being audited in 2019.

65. The COVID-19 pandemic starting early 2020 has totally overturned the use of observers in the Western Central Pacific, while domestic coverage continues in a few countries that have their own fleets, most vessels continue to fish without any observers on board. The Intersessional Decisions taken due to COVID-19 conditions, currently suspends the requirement to carry an ROP observer until 31 October 2020.

Administrative notes

66. For several years the Secretariat has compiled an updated booklet of the current Conservation and Management Measures and Resolutions that are relevant to ROP observers. It was decided at the WCPFC15 that the booklet no longer be published as a paper printed booklet. However, the booklet will still be compiled each year and is to be placed on the WCPFC Website, where it can be downloaded for electronic use, or if required for a printed copy. (<u>https://www.wcpfc.int/regional-observer-programme</u>)

67. General information on the WCPFC ROP, including ROP Minimum Standards for Observer Programmes, the list of ROP Observer Programmes and the ROP Minimum Data fields, are publicly available at this link: <u>https://www.wcpfc.int/regional-observer-programme.</u> This includes an updated set of guidelines on WCPFC ROP requirements as at the May 2020 (as requested by TCC13)

68. It was recommended to WCPFC12 that the IWG-ROP not be activated, unless there is any urgent matter raised by members during a SC or TCC requiring the IWG-ROP to be reformed. In 2020, the "WCPFC TCC working group on the flow of observer reports and observer continued to conduct its work electronically as tasked by the Commission and will report to TCC16.

Recommendation

69. TCC16 is invited to note and discuss the 12th Annual Report of the WCPFC Regional Observer Programme.

Counts of cases in the compliance case file system based on ROP observer data by year showing count of cases by Investigation Status and counts of cases where ROP Observer Report was received (based on ROP data available for the period 1 January 2015 – 18 June 2020, and updates from CCMs received as at 27 July 2020)

Table I: Counts of cases in the compliance case file system based on ROP observer data by year showing count of cases by Investigation Status and counts of cases where ROP Observer Report was received

FAI: FAD Sets Alleged infringements

OAI: Observer Obstructions Alleged Infringements

SHK: Shark Catch Alleged Infringements

CWS: Cetacean and Whale Shark purse seine fishery interactions

PAI: ROP Pre-Notification Issues, other than alleged observer obstruction

		Flag CCM Investigation	Flag CCM Investigation	Total Compliance	Total Sum of ROP_Rpt_Received_
	Flag CCM Notified	in Progress	Completed	Case Count	Count
□ 2015	6	210	381	597	164
FAI	6	12	237	255	20
OAI		64	87	151	87
SHK		134	57	191	57
= 2016	292	709	532	1533	268
CWS	31	227	203	461	199
FAI	5	5	219	229	10
OAI	1	34	29	64	29
PAI	255	409	71	735	17
SHK		34	10	44	13
2017	919	253	634	1806	213
CWS	112	185	149	446	156
FAI	52	31	459	542	26
OAI	5	15	11	31	16
PAI	746	11	7	764	7
SHK	4	11	8	23	8
= 2018	1249	285	205	1739	250
CWS	194	198	144	536	178
FAI	10	25	19	54	12
OAI	7	34	29	70	43
PAI	1005	8	1	1014	1
SHK	33	20	12	65	16
⊇ 2019	1145	169	64	1378	96
CWS	371	151	54	576	79
FAI	28	1	2	31	3
OAI	22	15	7	44	13
PAI	699		1	700	1
SHK	25	2		27	0
Grand Total	3611	1626	1816	7053	991

Table II: Summary of purse seine Whale Shark and Cetacean fishery interactions notified in the WCPFC online Compliance Case File System that were based on ROP d

Includes cases where a ROP observer has reported one or more interaction/s occurred between a purse seine vessel and cetaceans or whale sharks during a trip. Relevant WCPFC requirements include prohibiting purse seine vessels from setting if a whale shark or cetacean is sighted prior to the commencement of the set; required reporting of any incidents of unintentional encircling; and guidelines for safe release.

Source data: ROP observer data Period: 2016 – 2019

		■Flag CCM Notified	Flag CCM Investigation	■Flag CCM Investigatio	n Completed				Grand Total
Row Labels	w			Infraction - no sanction	•	Infraction - warning	NA	No infraction	
GCMM 2011-03		418	424		9	6	1	341	1199
2016		30	146		5	4		129	314
2017		82	116		3	1		99	301
2018		114	83		1	1	1	85	285
2019		192	79					28	299
GCMM 2012-04		290	337	1	6		4	182	820
2016		1	81		4			61	147
2017		30	69					46	145
2018		80	115	1			1	54	251
2019		179	72		2		3	21	277
Grand Total		708	761	1	15	6	5	523	2019

Notes: The relevant WCPFC decisions that should be referred to, in investigating these cases to determine whether they are alleged infringements are:

- Conservation and Management Measure for protection of whale sharks from purse seine fishing operations CMM 2012-04.
- Conservation and Management Measure for protection of cetaceans from purse seine fishing operations - CMM 2011-03

Table III: Summary of Shark Catch alleged Infringement cases by year showing count of cases by Investigation Status

Includes cases where a ROP observer has reported retention in part or whole of catches by vessels of shark species that are prohibited, or a fate code that may indicate shark finning activities.



		Flag CCM Investigation				
	■ Flag CCM Notified	🗉 in Progress	Flag CCM Investigation Complete	d		Grand Tota
Row Labels			Infraction - sanction	Infraction - warning	No infraction	-
CMM 2010-07	23	18	14		4	59
2015		14	14		2	30
2016		3			2	5
2017	1					1
2018	22	1				23
□CMM 2011-04	7	11	2		3	23
2015		9	2		1	12
2016		1				1
2017					1	1
2018	4	1			1	6
2019	3					3
CMM 2013-08	32	172	30	1	33	268
2015		111	26		12	149
2016		30	1		7	38
2017	3	11		1	6	21
2018	7	18	3		8	36
2019	22	2				24
Grand Total	62	201	46	1	40	350

Notes: the relevant CMM paragraphs that should be referred to, in investigating these cases to determine whether they are alleged infringements are:

CMM 2010-07: paragraph 9. CCMs shall take measures necessary to prohibit their fishing vessels from retaining on board, transshipping, landing, or trading any fins harvested in contravention of this Conservation and Management Measure (CMM).

CMM 2011-04: paragraph 1 and 2.

1. Members, Cooperating Non-Members and Participating Territories (CCMs) shall prohibit vessels flying their flag and vessels under charter arrangements to the CCM from retaining on board, transshipping, storing on a fishing vessel, or landing any oceanic whitetip shark, in whole or in part, in the fisheries covered by the Convention.

2. CCMs shall require all vessels flying their flag and vessels under charter arrangements to the CCM to release any oceanic whitetip shark that is caught as soon as possible after the shark is brought alongside the vessel, and to do so in a manner that results in as little harm to the shark as possible.

CMM 2013-08: paragraph 1 and 2:

1. Commission Members, Cooperating Non-Members and Participating Territories (CCMs) shall prohibit vessels flying their flag and vessels under charter arrangements to the CCM from retaining on board, transshipping, storing on a fishing vessel, or landing any silky shark caught in the Convention Area, in whole or in part, in the fisheries covered by the Convention.

2. CCMs shall require all vessels flying their flag and vessels under charter arrangements to the CCM to release any silky shark that is caught in the Convention Area as soon as possible after the shark is brought alongside the vessel, and to do so in a manner that results in as little harm to the shark as possible

Table IV: Summary of Observer Obstruction Alleged Infringement cases by year showing count of cases by Investigation Status

Includes cases notified in WCPFC online compliance Case File System, related to observer obstruction, identified in ROP observer data. (CMM 2007-01 14(vii) and CMM 2018-05 15(g))

Source data: WCPFC Observer Trip Monitoring Summary as submitted in ROP observer data

Period: 2015 – 2019

		Flag CCM Investigation					
	Flag CCM Notified	In Progress	Flag CCM Investigation Completed			Grand Total	
Row Labels			Infraction - no sanction	Infraction - sanction	Infraction - warning	No infraction	
⊡RS-A	19	63	2	5	3	51	143
2015		19	2		3	27	51
2016	1	17		3		8	29
2017	4	8				5	17
2018	3	15				10	28
2019	11	4		2		1	18
⊡RS-B	10	61	2	15	5	36	129
2015		28	2	5	4	21	60
2016		12		6		3	21
2017		4		2	1	3	10
2018	3	12		1		8	24
2019	7	5		1		1	14
⊡RS-D	6	38	10	2	2	30	88
2015		17	9		1	13	40
2016		5		1	1	7	14
2017	1	3					4
2018	1	7		1		9	18
2019	4	6	1			1	12
Grand Total	35	162	14	22	10	117	360

Notes: The relevant ROP pre-notification codes reported are:

RS-A: Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observer in the performance of their duties

RS-B: Request that an event not be reported by the observer

RS-D: Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel

 Table V: ROP Pre-Notification Issues (other than alleged observer obstruction incidents)

 Summary Table of Flag CCM responses to ROP Pre-Notification Issues, other than alleged observer obstruction, presently notified in WCPFC online Compliance Case File System

ROP Pre-Notification Issues: Provides notification to flag CCMs of those data elements (other than alleged observer obstruction incidents) that were answered in the affirmative by a ROP observer on the WCPFC Observer Trip Monitoring Summary, or which are included in SPC/FFA General Form 3.

**WCPFC14 accepted the TCC13 recommendation that the process of not considering the information contained in the ROP Pre-notification List, for the purpose of assessing any obligations for which it was relevant, with the exception of those cases related to observer interference or obstruction be followed in future years (WCPFC14 final CMR).

WCPFC ROP Pre-notification codes

LC-A	inaccurately record retained "target species" in the vessel log
LC-B	inaccurately record "target species" discards
LC-C:	record species inaccurately
LC-E	inaccurately record bycatch species discards
LC-F	inaccurately record retained bycatch species
LP-A	inaccurately record vessel positions on vessel log sheet for sets, hauling and catch
WC-b	high-grade the catch
SI-b	Interact (not land with SSIs)
WC-a	Fail to comply with any Commission Conservation and Management Measures
NR-a	Fish in any areas where the vessel is not permitted to fish
NR-c	Use a fishing method other than the method the vessel was designed or licensed
NR-e	Transfer or transship fish from or to another vessel
NR-g	Fail to stow fishing gear when entering areas where vessel is not authorised to fish
LP-b	Fail to report vessel positions to countries, where required when entering and leaving an EEZ(crossing
	to or from an EEZ into or out of the High Seas)
PN-a	Dispose of any metals, plastics, chemicals or old fishing gear
PN-b	Discharge any oil
PN-c	Lose any fishing gear
PN-d	Abandon any fishing gear
PN-e	Fail to report any abandoned gear
SS-a	Fail to monitor international safety frequencies

_	■Flag CCM Notified ■	Flag CCM Investiga in Progress	Flag CCM Investigation				Grand Total
Row Labels 🔻			Infraction - no sanction				
■LC-A 2016	865 97	145 137	1	2	3 2	17 17	1033 254
2016	217	5	1	2	4	1/	254
2018	326	3					329
2019	225				1		226
🗆 LC-B	1443	231	1	7	8	30	1720
2016	140	220	1	4	4	30	399
2017	390	7 4		3	2		402
2018 2019	536 377	4			1		541 378
□LC-C	1353	218		5	1	42	1618
2016	115	204		3		42	364
2017	353	11		2			366
2018	523	3					526
2019	362		-	-	_	_	362
■ LC-Е 2016	403 39	63 60	2 2	2	7 4	7 7	484 114
2018	98	3	Z	2	2	/	103
2018	147				1		148
2019	119						119
🗆 LC-F	515	109	2	2	1	17	646
2016	50	106	2	2	1	17	178
2017	136	3					139
2018	175 154						175 154
2019 LP-A	28	5	1				154 34
2016	1	5	1				34 7
2017	6						6
2018	10						10
2019	11						11
ELP-B	36	6				2	44
2016 2017	4 7	6				2	12
2017	16						16
2019	9						9
BNR-A	41	8			1	2	52
2016	7	8			1	2	18
2017	8						8
2018	16						16
2019	10 29	3				2	10 34
2016	23	3				2	7
2017	20	-				_	20
2018	3						3
2019	4						4
⊡NR-E	222	24	1			3	250
2016	19 74	23	1			3	46
2017 2018	90	1					75 90
2019	39						39
⊡NR-G	114	21					135
2016	19	20					39
2017	26	1					27
2018	47						47
2019	22	1.47		4	7	12	22
2016	534 79	147 144		2	7 4	12 12	704 241
2017	139	2		2	2		145
2018	200	1			1		202
2019	116						116
BPN-B	135	37			2	2	176
2016	18	36			1	2	57
2017	34	1					35
2018 2019	56 27				1		56 28
PN-C	10	4			1	1	16
2016	2	4				1	7
2017	2						2
2018	4				1		5
2019	2				-	-	2
PN-D 2016	121 16	31 31	1	1	2	3 3	159 54
2016 2017	33	51	1	T	2	3	33
2017	42						42
2019	30						30
BPN-E	21	3		1			25
2016	1	3		1			5
2017	4						4
2018 2019	7 9						7
= SI-B	1163	152	1	1	5	22	1344
2016	90	145	1	1	2	22	261
2017	256	2			1		259
2018	478	5			1		484
2019	339	-			1		340
SS-A	9	2					11
2016 2017	4 2	2					6
2017	2						2
2019	1						1
wc-A	426	56		1		10	493
2016	44	52		1		10	107
2017	108	2					110
2018	173	2					175
2019	101	13		1			101
■WC-В 2016	59 9	12 12		1			72 22
2016	14	12		1			14
2018	24						24
2019	12						12
	7527	1277	10	27	37	172	9050

Table VI: Summary of FAD Sets Alleged infringements cases by year showing count of cases by Investigation Status

Includes cases where a ROP observer has reported setting on FADs during a specified time period and/or in specific waters in the Convention when the prohibition on setting on FADs was in effect. **Source data:** ROP observer data

Period:	2015	-2019
I er ivu.	2015	- 2017

		Flag CCM Investiga	tion		
	🗄 Flag CCM Notifie	d 🗉 in Progress	Flag CCM Investigation Con	npleted	Grand Total
Row Labels	•		Infraction - sanction	No infraction	-
□ 2015	6	12	2	235	255
CMM 2014-01 14	6	12	2	230	250
CMM 2014-01 16				5	5
□ 2016	5	5	3	216	229
CMM 2015-01 14	5	5	3	215	228
CMM 2015-01 16				1	1
□ 2017	52	31		459	542
CMM 2016-01 14	39	13		387	439
CMM 2016-01 16	6			70	76
CMM 2016-01 18	7	18		2	27
2018	10	25		19	54
CMM 2017-01 16	9	21		19	49
CMM 2017-01 17	1	4			5
2019	28	1		2	31
CMM 2018-01 16	27	1		2	30
CMM 2018-01 17	1				1
Grand Total	101	74	5	931	1111

Notes: The relevant CMM paragraphs that should be referred to, in investigating these cases to determine whether they are alleged infringements are:

* 3-month FAD closure Tropical Tunas (1 July - 30 Sept FAD closure)

Year 2015 = CMM 2014-01 14Year 2016 = CMM 2015-01 14Year 2017 = CMM 2016-01 14Year 2018 = CMM 2017-01 16Year 2019 = CMM 2018-01 16

* 4th Month FAD Closure (1 - 31 Oct FAD closure) FAD Sets Alleged infringements

Year 2015 = CMM 2014-01 16 Year 2016 = CMM 2015-01 16 Year 2017 = CMM 2016-01 16

* High Seas FAD closure

Year 2017 = CMM 2016-01 18 Year 2018 = CMM 2017-01 17 Year 2019 = CMM 2018-01 17